Claims

1. The use of an optionally hydroxy-protected 4-hydroxy or hydroperoxy-3,5-dioxo-pyrazolidine or an equivalent wherein a pyrazolidine ring attached oxygen is replaced by a sulphur, or a physiologically acceptable salt thereof, for the manufacture of a medicament for use in therapy or prophylaxis.

2. A method of treatment of the human or non-human body to combat an inflammatory or viral disease, which method comprises administering to said body an optionally hydroxy-protected 4-hydroxy or hydroperoxy-3,5-dioxo-pyrazolidine or an equivalent wherein a pyrazolidine ring attached oxygen is replaced by a sulphur, or a physiologically acceptable salt thereof.

3. A method as claimed in claim 2 comprising administering said optionally hydroxy-protected 4-hydroxy or hydroperoxy-3,5-dioxo-pyrazolidine or an equivalent wherein a pyrazolidine ring attached oxygen is replaced by a sulphur, or a physiologically acceptable salt thereof in combination with another antiviral agent.

4. A method as claimed in claim 3 wherein said additional antiviral agent is at least one antiviral agent selected from a reverse transcriptase inhibitor and a protease inhibitor.

5. A method as claimed in claim 3 wherein said additional antiviral agent is an agent selected from the group of AZT, indinavir, nevirapine and 2',3'-dideoxyinosine (daI).

6. A method as claimed in any of claims 2 to 5 wherein said disease is a disease caused by a pathogen from the

group of togaviridea, reoviridea, picornaviridea, hantaviridea, orthomyxoviridea, paramyxoviridea, mononegaviralis, viral hepatitis, haemorrhagic fevers, flaviviridea, viral encephalitis, coronaviridea, calciviridea, adenoviridea, papovaviridea, arboviridea, pox virus, rhabdoviridea, arenaviridea HIV-1, HIV-2, HTLV-I, HTLV-II and herpes viruses.

7. A method of combatting HIV infection which comprises administering to an HIV-infected patient a T-lymphocyte growth suppressing agent in an amount sufficient to suppress T-lymphocyte growth in said patient for a period sufficient to reduce the T-lymphocyte concentration in the lymphatic system in said patient by at least 25% said administration being repeated at intervals of at least 3 months.

8. A method of combatting HIV infection as claimed in claim 6 wherein said T-lymphocyte growth suppressing agent is a pyrazolidinol.

9. A method as claimed in claim 7 or claim 8 wherein said interval is at least 9 months.

10. A method as claimed in any of claims 7 to 9 wherein a 4-hydroxy or hydroperoxy-3,5-dioxo-pyrazolidine or an equivalent wherein a pyrazolidine ring attached oxygen is replaced by a sulphur, or a physiologically acceptable salt thereof is administered in a daily dose of 0.1 to 10 μmol/kg bodyweight.

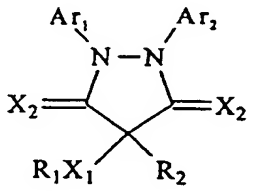
11. A pharmaceutical composition comprising an optionally hydroxy-protected 4-hydroxy or hydroperoxy-3,5-dioxo-pyrazolidine or an equivalent wherein a pyrazolidine ring attached oxygen is replaced by a sulphur, or a physiologically acceptable salt thereof, together with at least one pharmaceutically acceptable

carrier or excipient.

12. A pharmaceutical composition as claimed in claim 11 additionally comprising another antiviral agent.

13. An optionally hydroxy-protected 4-hydroxy or hydroperoxy-3,5-dioxo-pyrazolidine or an equivalent wherein a pyrazolidine ring attached oxygen is replaced by a sulphur, or a physiologically acceptable salt thereof.

14. A compound of formula I



(I)

(where each X_2, which may be the same or different is O or S,
X_1 is O, OO or S,
R_1 is hydrogen or a hydroxyl or thiol protecting group,
R_2 is hydrogen or a carbon attached organic group containing up to 10 carbons, and each of
Ar_1 and Ar_2, which may be the same or different, is a homo or heterocyclic aromatic group) or a salt thereof.

15. A compound of claim 14 wherein R_1, R_2, X_1, X_2, Ar_1 and Ar_2 are as defined in claim 14, providing that if X_1 and each X_2 is O, the remaining groups do not correspond to the following table:

R_2	R_1	Ar_1	Ar_2
H	H	H	C_6H_5
H	H	C_6H_5	C_6H_5
CH_3	H	H	C_6H_5
CH_3	H	H	$-CH_2-C_6H_5$
CH_3	H	H	$p-CH_3O-C_6H_4$
CH_3	H	H	$p-Cl-C_6H_4$
C_2H_5	H	H	C_6H_5
C_2H_5	H	C_6H_5	C_6H_5
C_2H_5	H	H	N-methyl-piperidin-4-yl
iC_3H_7	H	H	C_6H_5
nC_3H_7	H	H	C_6H_5
nC_3H_7	H	C_6H_5	C_6H_5
nC_3H_7	H	H	5-phenyl-triazol-1-yl
C_4H_9	H	H	C_6H_5
C_4H_9	H	C_6H_5	C_6H_5
C_4H_9	H	C_6H_5	$p-OH-C_6H_4$
C_4H_9	OH	C_6H_5	C_6H_5
C_4H_9	OH	C_6H_5	$p-OH-C_6H_4$
C_4H_9	H	H	N-methyl-piperidin-4-yl
C_5H_{11}	H	H	C_6H_5
C_5H_{11}	H	C_6H_5	C_6H_5
C_5H_{11}	H	H	5-phenyl-triazol-1-yl
Cyclohexyl	H	H	C_6H_5
Phenyl	H	H	C_6H_5
Phenyl	H	C_6H_5	C_6H_5
Benzyl	H	H	C_6H_5
Benzyl	H	C_6H_5	C_6H_5
$CH_3CO(CH_2)_2$	H	C_6H_5	C_6H_5
$(CH_3)_2C=CH-$	H	C_6H_5	C_6H_5
$(CH_2)_2C=CHCH_2$	H	C_6H_5	C_6H_5
$C_6H_5SCH_2CH_2$	H	C_6H_5	C_6H_5
Pyrrolidin-1-yl	H	C_6H_5	C_6H_5
Piperidin-1-yl	H	C_6H_5	C_6H_5
Morpholin-4-yl	H	C_6H_5	C_6H_5

16. A compound as claimed in claim 14 or claim 15 wherein one X_2 group is S.

17. A compound as claimed in any of claims 14 to 16 wherein X_1 is O.

18. A compound as claimed in any of claims 14 to 17 wherein R_1 is acyl.

19 A compound as claimed in any of claims 14 to 18 wherein R_1 is hydrogen.

20. A compound as claimed in any of claims 14 to 19 wherein one of Ar_1 and Ar_2 is Ph and the other is 4-hydroxyphenyl.

21. A compound as claimed in claim 14 wherein each X_2 is oxygen, R_1X_1 is HO or $CH_3CO.O$, each of Ar_1 and AR_2, which may be the same or different is optionally halo or hydroxy substituted phenyl, and R_2 is C_{1-6} alkyl or alkenyl, or a salt thereof.

22. A compound as claimed in any of claims 14 to 21 for use as a medicament.

23. 4-Butyl-4-hydroxy-2(p-hydroxyphenyl)-1-phenyl-3,5-pyrazolidinedione for use as a medicament.

24. A method of treatment of the human or non-human body to combat an autoimmune disease or tissue rejection, which method comprises administering to said body an optionally hydroxy-protected 4-hydroxy or hydroperoxy-3,5-dioxo-pyrazolidine or an equivalent wherein a pyrazolidine ring attached oxygen is replaced by a sulphur, or a physiologically acceptable salt thereof.

25. A method of claim 24 wherein said disease is selected from Addison's disease, Behçet's syndrome, diabetes mellitus, haemolytic anaemia, lupus erythematosus, multiple sclerosis, myasthenia gravis, pernicious anaemia, polyglandular deficiency, polymyositis, dermatomyositis, testicular failure, thrombocytopenic purpura, Crohns disease, ulcerative colitis and rheumatoid arthritis.

26. A method of claim 24 wherein said tissue rejection is tissue rejection following transplant.